

Instruments for preparing independent kungfu environment

1. 本文档中我全部使用 su - 转换成 root 来执行，你可以使用 sudo 来执行

2. yum install rpm-build

3. yum install numactl

#install gcc

yum groupinstall "Development Tools"

4. guide of install cmake-[3.8.*]:

wget <https://cmake.org/files/v3.11/cmake-3.11.3.tar.gz>

tar zxvf cmake-3.11.3.tar.gz

cd cmake-3.11.3/

./bootstrap

[返回显示.....CMake has bootstrapped. Now run gmake.]

gmake

gmake install

/usr/local/bin/cmake --version

[返回显示...cmake version 3.11.3]

cmake -version

[返回显示...cmake version 3.11.3]

5. commands of install log4cplus [<https://github.com/log4cplus/log4cplus>]:

git clone <https://github.com/log4cplus/log4cplus.git>

cd log4cplus/

git submodule update --init --recursive

mkdir build

cd build

cmake ..

make

make install

[返回显示...../usr/local/lib64/liblog4cplus.so]

[返回显示....Installing: /usr/local/bin/loggingserver.....]

[注意发现功夫的 **docker** 这些文件都在另一个目录，所以需要建立 4 个链接文件]

###ln [参数][源文件或目录][目标文件或目录]

ln -s /usr/local/bin/loggingserver /usr/bin/loggingserver

ln -s /usr/local/lib64/liblog4cplus.so.2.0.0 /usr/lib64/liblog4cplus.so.2.0.0

ln -s /usr/local/lib64/liblog4cplus.so.0 /usr/lib64/liblog4cplus.so.0

ln -s /usr/local/lib64/liblog4cplus.so /usr/lib64/liblog4cplus.so

add LD_LIBRARY_PATH for all users

The cleanest way to add a library to the search path is by adding a file to
/etc/ld.so.conf.d/

suppose log4cplus is installed in /usr/local/lib, run :

#echo "/usr/local/lib" >> /etc/ld.so.conf.d/log4cplus-2.0.so.conf

my log4cplus is installed in /usr/local/lib64, run :

echo "/usr/local/lib64" >> /etc/ld.so.conf.d/log4cplus-2.0.so.conf

load the new configuration, run the following command as root:

ldconfig -v

ldconfig

6. guide of install pid-2.1.1:

yum install python-nose

```
curl "https://bootstrap.pypa.io/get-pip.py" -o "get-pip.py"
```

```
python get-pip.py
```

```
pip -V
```

```
pip install pid
```

7. install supervisor

install dependency meld3 (yum install python-meld3)

```
yum install python-meld3
```

I meet no package python-meld3 available error, and run 'yum update',

#you may not need it

```
pip install meld3
```

```
pip install supervisor
```

8. guide of install boost-1.62:

#there is no python in it, you need reference :

[#https://blog.csdn.net/majianfei1023/article/details/46781581](https://blog.csdn.net/majianfei1023/article/details/46781581)

```
sudo yum install python-devel
```

wget

https://sourceforge.net/projects/boost/files/boost/1.62.0/boost_1_62_0.tar.gz

tar zxvf boost_1_62_0.tar.gz

cd boost_1_62_0

mkdir /opt/kungfu/

mkdir /opt/kungfu/toolchain

mkdir /opt/kungfu/toolchain/boost-1.62.0

#安装 boost 基础库

./bootstrap.sh --prefix=/opt/kungfu/toolchain/boost-1.62.0

./b2 install --prefix=/opt/kungfu/toolchain/boost-1.62.0

#执行第二遍，专门安装 boost.python

./b2 --with-python --prefix=/opt/kungfu/toolchain/boost-1.62.0 install

#there is /usr/lib64/libpython2.7.so, but we need libpython.so, run this

command to make a soft link:

ln -s /usr/lib64/libpython2.7.so.1.0 /usr/lib64/libpython.so

#maybe need a reload:

ldconfig

#ldconfig -v

9. guide of install rfoo [<https://github.com/aaiyer/rfoo>]:

#looks rfoo requires python, so I run it after boost.python installed.

git clone <https://github.com/aaiyer/rfoo.git>

cd rfoo/

#install dependency Cython first

pip install Cython

#[遇到错误信息]

#ipacient 4.5.4 requires jinja2, which is not installed.

#rtslib-fb 2.1.63 has requirement pyudev>=0.16.1, but you'll have pyudev 0.15

#which is incompatible.

#ipapython 4.5.4 has requirement dnspython>=1.15, but you'll have

#dnspython 1.12.0 which is incompatible.

#解决:

#安装 jiaja2

yum -y install python-jinja2

#更新 pyudev

git clone https://github.com/lunaryorn/pyudev.git

cd pyudev

sudo python setup.py install

#更新 dnspython

wget http://www.dnspython.org/kits/1.15.0/dnspython-1.15.0.tar.gz

tar -zxvf dnspython-1.15.0.tar.gz

cd dnspython-1.15.0

sudo python setup.py install

#再运行一遍 pip install Cython 不再显示错误

#继续执行 rfoo 的安装

sudo python setup.py install

#遇到错误 unknown file type '.pyx' (from 'rfoo/marsh.pyx') 解决办法:

办法 1) 先编译成 c 语言的再执行安装

cd rfoo/

python marsh.pyx 编译出 marsh.c

修改

ext_modules = [Extension("rfoo.marsh", ["rfoo/marsh.pyx"])]

为

ext_modules = [Extension("rfoo.marsh", ["rfoo/marsh.c"])]

再次执行 python setup.py install 成功了:

[root@VM 24 28 centos rfoo]# python setup.py install

running install

running build

running build_py

running build_ext

building 'rfoo.marsh' extension

creating build/temp.linux-x86_64-2.7

creating build/temp.linux-x86_64-2.7/rfoo

gcc -pthread -fno-strict-aliasing -O2 -g -pipe -Wall -Wp,-D FORTIFY SOURCE=2 -fexceptions -fstack-protector-strong --param=ssp-buffer-size=4 -grecord-gcc-switches -m64 -mtune=generic -D GNU_SOURCE -fPIC -fwrapv -DNDEBUG -O2 -g -pipe -Wall -Wp,-D FORTIFY SOURCE=2 -fexceptions -fstack-protector-strong --param=ssp-buffer-size=4 -grecord-gcc-switches -m64 -mtune=generic -D GNU_SOURCE -fPIC -fwrapv -fPIC -I/usr/include/python2.7 -c rfoo/marsh.c -o build/temp.linux-x86_64-2.7/rfoo/marsh.o

gcc -pthread -shared -Wl,-z,relro build/temp.linux-x86_64-2.7/rfoo/marsh.o -L/usr/lib64 -lpython2.7 -o build/lib.linux-x86_64-2.7/rfoo/marsh.so

running build_scripts

creating build/scripts-2.7

copying and adjusting scripts/rconsole -> build/scripts-2.7

changing mode of build/scripts-2.7/rconsole from 644 to 755

running install lib

creating /usr/lib64/python2.7/site-packages/rfoo

copying build/lib.linux-x86_64-2.7/rfoo/marsh.so -> /usr/lib64/python2.7/site-packages/rfoo

copying build/lib.linux-x86_64-2.7/rfoo/ rfoo.py -> /usr/lib64/python2.7/site-packages/rfoo

creating /usr/lib64/python2.7/site-packages/rfoo/utils

copying build/lib.linux-x86_64-2.7/rfoo/utils/rconsole.py -> /usr/lib64/python2.7/site-packages/rfoo/utils

copying build/lib.linux-x86_64-2.7/rfoo/utils/ init .py -> /usr/lib64/python2.7/site-packages/rfoo/utils

copying build/lib.linux-x86_64-2.7/rfoo/ init .py -> /usr/lib64/python2.7/site-packages/rfoo

byte-compiling /usr/lib64/python2.7/site-packages/rfoo/ rfoo.py to rfoo.pyc

byte-compiling /usr/lib64/python2.7/site-packages/rfoo/utils/rconsole.py to rconsole.pyc

byte-compiling /usr/lib64/python2.7/site-packages/rfoo/utils/ init .py to init .pyc

byte-compiling /usr/lib64/python2.7/site-packages/rfoo/ init .py to init .pyc

running install scripts

copying build/scripts-2.7/rconsole -> /usr/bin

changing mode of /usr/bin/rconsole to 755

running install egg info

Writing /usr/lib64/python2.7/site-packages/rfoo-1.3.1-py2.7.egg-info

[root@VM 24 28 centos rfoo]#

办法 2)

```
[root@localhost rfoo]# git diff
diff --git a/setup.py b/setup.py
index 8d08855..f917318 100644
--- a/setup.py
+++ b/setup.py
@@ -37,7 +37,8 @@ import sys

from distutils.core import setup
from distutils.extension import Extension
- from distutils.command.build_ext import build_ext
+ # from distutils.command.build_ext import build_ext
+ from cython.Distutils import build_ext

if 'bdist_egg' in sys.argv:
    sys.stderr.write("=====")
[root@localhost rfoo]#
```

或者

from Cython.Build import cythonize

ext_modules = cythonize(ext_modules)

办法3)

<https://github.com/aaiyer/rfoo/issues/7>

10. compiling kungfu and install kungfu

git clone <https://github.com/taurusai/kungfu.git>

cd kungfu

mkdir build

cd build

cmake..

make

make package

yum install kungfu-0.0.5-Linux.rpm

现在安装会报错：

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: rfoo >= 1.3.1

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: log4cplus2 = 2.0.0 RC1

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: pid >= 2.1.1

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: supervisor >= 3.1.0

经过修改 kungfu/CMakeLists.txt，“功夫的这个文件后来有更新”。

#92 行

OPTION(SKIP_DEPENDENCY_CHECKING

"SKIP_CHECK_KUNGFU_DEPENDENCY, default OFF." ON)

从 OFF 改为 ON，再删除 build 下重新 cmake .. 就好了，不觉明历：

build]# rm -rf *

build]# cmake ..

build]# make && make package

build]# yum install kungfu-0.0.5-Linux.rpm

Install 1 Package

Total size: 60 M

Installed size: 60 M

Is this ok [y/d/N]:

11. 当需要一些加密库的时候，使用下述命令安装

比如：

fatal error: openssl/ssl.h: No such file or directory

执行

yum install openssl-devel

解决问题

yum install libssh.x86_64

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